Lower Rio Grande, Rio Grande Estuary, and Lower Laguna Madre Bay and Basin Expert Science Team (Lower BBEST)

First Meeting

Wednesday, April 20, 2011 at 11:00 a.m.
University of Texas-Pan American, Edinburg, Texas
April 22, 2011

MINUTES

Members Present: Jude Benavides; David Buzan; Hudson DeYoe; Bob Edwards; Carlos Marin; and Warren Pulich.

Introductions

Cory Horan, TCEQ, welcomed everyone to the meeting. BBASC members introduced themselves and discussed their background and affiliations. Mr. Horan introduced SAC liaison Bob Brandes who was in attendance via conference call.

Texas Environmental Flows Science Advisory Committee Remarks

SAC liaison Dr. Bob Brandes discussed the role of SAC in SB3 and talked about the SAC guidance available to the group. He mentioned the time constraint of this BBEST and the advantages of utilizing the work done by other BBESTs. He added that committee members Warren Pulich and David Buzan had served on other BBESTs and their experience would prove beneficial. He stressed the importance of defining the group's geographic scope as soon as possible to make the most of the time, expertise, and funding available.

Overview of SB3 and role of the Basin and Bay Expert Science Team

Cory Horan, TCEQ, provided an overview of Senate Bill 3. He discussed the charges of the SAC, BBEST and BBASC, and the responsibilities and deliverables of each committee. He said the goals of the BBEST are to develop an environmental flow analysis and environmental flow regime for the basin and bay system. He discussed the work plan component, the need to define a sound ecological environment, the importance of adaptive management and the goals of the committee as they relate to water attained from Mexico.

Substantial Water used by Mexico

Dr. Brandes discussed the objectives of the committee and how to address the water from Mexico. He talked about how the Sabine BBEST chose to look at the needs of the environment despite similar issues with divided ownership of the water. He added that the group will have access to data from gages in Mexico including some on major tributaries.

Geographic Limit of Scope

Mr. Horan stated that members needed to define the geographic limits of the BBEST's charge. He added the stakeholders established two BBESTs with the intent the Lower

BBEST would focus on the marine environment by looking at freshwater inflows into the Laguna Madre including the Arroyo Colorado, and not instream flows downstream of Falcon Lake and Lake Amistad. Members continued to discuss the committee's geographic scope and decided to table the final decision until a later time.

Comments from Basin and Bay Area Stakeholder Committee (BBASC)
BBASC Chair Tony Reisinger talked about the short timeline facing the BBEST. He suggested the BBEST focus on the freshwater inflows and in the future sound ecological environment assistance from the state agencies in evaluating the instream flow needs. He mentioned critical issues such as freshwater inflows in the Laguna Madre due to recent events, sea grass areas, impact of the drought, and their importance on future management of the Laguna Madre and estuarine portion of the river. He noted a future presentation to the BBASC by the Coastal Fisheries on the Productivity of the Estuarine Areas of the Rio Grande. Mr. Horan noted that activities of each group will be shared with all members and urged members to take advantages of opportunities offered during committee meetings.

Budget Overview and Discussion
Carla Guthrie, TWDB, presented the role of TWDB in overseeing the BBEST budget. She discussed the SB3 funding to support SAC and BBESTs through this fiscal year, and the lack of funding beyond August 31, 2011. She distributed packets to new members with the necessary reimbursement forms. She recommended the chairs of the upper and lower Rio Grande BBESTs coordinate on how the limited funding will be split between them and the need for each BBEST to establish a budget for approval by TWDB and EFAG. Members should turn in invoices on billable hours as soon as possible so that an accurate account of remaining funds is available.

She asked that the BBEST Chair keep track of hours used and tasks assigned to facilitate tracking the budget. An update of the budget status will be presented at each meeting. She mentioned contracts for work may be difficult due to the August 31, 2011 deadline. However, contracts to state agencies and universities are handled under an accelerated process, and state agencies (TPWD and TWDB) can provide technical support in biology, GIS, field measurements/cross sections, and other support to the extent resources allow.

Mr. Horan distributed a draft budget for discussion. He stated that the budget and decisions related to outside contracts needs to be developed as soon as possible. He informed members that the state resource agencies (TCEQ, TWDB, & TPWD) are to assist the group in an administrative and technical capacity, as determined by the BBEST. He asked members to consider the election of a chair and vice chair to ensure that the decision-making power lies with the BBEST.

Set Ground Rules/Operating Procedures, Discussion and Adoption
Mr. Horan presented an overview of potential ground rules and decisions needed regarding what constitutes a quorum and consensus. He discussed the website dedicated to the group and available to the public and distributed draft meeting rules for consideration. He added that meetings are usually held in different locations to provide

an opportunity for the public to attend with conferencing capabilities available for those who cannot. A motion to adopt the rules was made and seconded. Members approved by consensus the meeting rules as drafted.

Previous BBEST Experience

Cory Horan asked Warren Pulich and David Buzan to discuss their experience with other BBEST committees. Dr. Buzan urged members to consider the amount of time and work required for this committee. He noted the SAC has published guidance on how the BBEST reports are reviewed and added that by looking at what deliverables are expected, members will have a better idea of what is needed. He discussed factors that the SAC will use in their review of the BBEST report and identified the following factors/considerations the BBEST will need to address:

- Analyses based on all reasonably available science with regard to usage for ecological purposes;
- Documentation of data sources and analysis
- Consideration of outside sources (non-science/non environmental needs) for recommendation
- Does the recommendation quantitatively support a sound ecological environment

Dr. Pulich gave an overview of the GSA environmental flows report as an example of what is expected in the end product.

Election of BBEST Chair and Vice Chair

Mr. Horan explained that the chair provides direction to the other members, assigns external tasks, and leads the meeting, and as the representative of TCEQ, he is responsible for all the logistical support. Members approved by unanimous consensus to appoint Hudson De You to serve as Chair and David Buzan to serve as Vice Chair of the Lower Rio Grande BBEST.

Mr. DeYoe stated that completing the necessary work by August 31, 2011 is nearly impossible. Members discussed possible sources of funding after August 31, 2011 and several members indicated they would continue to work when funding is no longer available. Members agreed to two-day meetings/workshops so adequate time is available to work through decisions. The group discussed establishing a timeline and trying to utilize as much of the budget as possible while it is available. Mr. Horan stated that due to the time limitation it might be more appropriate to have a conceptual plan and focus on what data is needed and available. He suggested forming workgroups to produce recommendations for the consideration by the full group at the next meeting on the following:

- Identify focal species
- Look at inflow and hydrology
- Define sound ecological environment

Members discussed the hydrologic needs and available gage data in two basins, the Arroyo Colorado and Rio Grande; and noted that no gages are located in the ship channel, an ungaged smaller internal basin. Members added that from the existing gages, the data can be used to identify the period of record. Dr. Buzan summarized the four areas identified from the discussion considered for the geographic scope:

- Freshwater inflow from the Laguna Madre (supplies flow for the Arroyo Colorado)
- Arroyo Colorado (1 gage)
- Estuarine reach of the Rio Grande (upstream gage above the tidal)
- Resaca and drainage ditches that drain into ship channel

Dr. Buzan proposed that at the next meeting, members be prepared to discuss:

- Description of what characterizes a sound ecological environment for the Lower Laguna Madre, Arroyo Colorado, Rio Grande Estuary and the Resaca/drainage districts and why;
- Time period the characterization applies;

With this information, members can focus on key habitats, focal species, and guilds needing protection; can determine what work needs to be done to describe a flow regime (variability) that protects that sound ecological environment; and ultimately set a more detailed timeline and budget.

Science Subcommittees

Members discussed how the work will be designated. They decided that assignments based on discipline would be the most beneficial. Assignments were distributed as follows:

- Inflow and hydrology: Carlos Marin, Jude Benavides, Bob Edwards
- Laguna Madre productivity and sound ecological environment: Warren Pulich, Hudson DeYoe
- Biology and nutrient exchange: Jude Benavides, Dave Buzan
- Biology for the Laguna Madre, Arroyo Colorado, and Rio Grande: Bob Edwards, Dave Buzan
- Dave Buzan: Water Quality data on Resaca and drainage basin
- Hudson DeYoe – Water quality on Rio Grande tidal

Mr. Buzan requested that Roger Miranda, TCEQ, talk with the group about the relationship between water quality and flow in the Arroyo Colorado. Members discussed the salinity gradient, salinity wedge and nutrient data available and how it needed to be related to flow. They also discussed how the limits of the salinity wedge impacts freshwater/salt water vegetation and how that information relates to estuaries.

Members noted that the data is limited in the Resaca with no continuous monitoring sites. However, there is data from non-point source studies completed 10 years ago, fish studies, depth/sediment thickness studies, salinity/oxygen studies, and a little nutrient information. Dave Buzan offered to research and provide water quality data on resacas.

Mr. Buzan mentioned the potential need for a literature search and discussed the remaining overlays to be considered including geomorphology. Members agreed that sediment transport and sediment accumulation are critical components of the Resaca since sediment has been pumped into the active reservoirs. Members asked if TWDB could provide support with geomorphology overlay.

For the Rio Grande tidal area, the committee agreed on the importance of determining the minimum flow needed to keep the mouth of the river open and ensure critical freshwater inflow despite the sediment inflow.

Mr. Buzan suggested members look at the definition of a sound ecological environment presented in the most recent BBEST final reports.

Cory Horan asked members to include him in all communications that go to the whole group so that he can make sure everyone is informed.

Set Next Meeting
The next meeting is scheduled for Thursday and Friday, May 26 and 27, 2011 at 9:00 a.m. at University of Texas-Pan American, Edinburg, Texas. The following meetings are tentatively scheduled for the dates and locations listed below. Members will be notified with the time and location.

- Thursday/Friday, June 30 and July 1, 2011
- Wednesday/Thursday, July 20 and 21, 2011
- Tuesday/Wednesday, August 16 and 17, 2011

Proposed Agenda Items

- Budget Status
- Presentation on inflows to Tamaulipas Laguna (TPWD, TWDB)
- Discussion by Roger Miranda on relationship of Water Quality to flow regimes of Mexico to Lower Laguna, and how water regulations of Mexico

Public Comment
There was no public comment at this time.

Adjourn